Overview of Potential Changes to Wisconsin's Soil Standards

Dec. 1, 2005

DNR promulgated Wisconsin's administrative code for contaminated soil cleanup, chapter NR 720, on April 1, 1995. Since then we've discussed implementation concerns with this rule and options for revision, most recently with our Technical Focus Group. The summary below provides the RR Program's current concepts for revision of NR 720.

Issue A – Use of Table Values in NR 720 – The table values do not "keep up" with current research on the toxicity of contaminants.

- Remove table values and replace them with the process for calculating site-specific residual contaminant levels (RCLs).
- Base RCLs for groundwater protection on groundwater Enforcement Standards rather than Preventive Action Limits.
- Consider more than two land use categories on which to base site-specific RCLs.

Issue B – Cleanup Standards for Lead - The table values for lead are no longer consistent with recommendations from EPA and the WI Dept. of Health & Family Services (Health).

• Replace numeric values for lead with the process to calculate site-specific RCLs, using assumptions similar to those used by Health and EPA.

Issue C – Cleanup Standards for Arsenic - The table values are typically below background levels of arsenic and are inconsistent with the approach of Health and the WI Dept. of Agriculture and Consumer Protection.

- Replace the numeric values for arsenic with the process to calculate site-specific RCLs.
- Implement a long-term study with Health for determining statewide or regional background standard(s) for arsenic.

Issue D – Comparing Soil Cleanup Standards to Sampling Results – Consultants have asked if sampling results may sometimes be averaged rather than individually compared to an RCL.

- Modify the rule to allow averaging on case-by-case basis when DNR pre-approval is obtained.
- Continue to require treatment or removal of contaminant "hot spots".

Issue E – Definition of Direct Contact – EPA recently questioned DNR's authority to regulate exposure other than ingestion or inhalation of soil particles.

- Expand the definition of direct contact to include human exposure through inhalation of vapors and dermal absorption.
- This is currently done on a site-specific basis will not change the regulation of sites.

Issue F – Use of GRO/DRO Cleanup Values – DNR technical staff use compound-specific RCLs, not broad indicators of contamination such as Gasoline Range Organics (GRO) and Diesel Range Organics (DRO).

- Remove the GRO and DRO standards and add a note to chapter NR 716 saying that GRO and DRO may be used for screening purposes.
- Consider using DRO where no compound-specific contaminants are detected but considerable contamination is present (e.g. hydraulic oil spills).

In general, our Technical Focus Group felt that we had identified the major rule provisions that require change and that our proposed direction for changes was sound. These early discussions are very preliminary, and after we have drafted more specific proposals we will seek further input from stakeholders and then ask the Natural Resources Board for approval to conduct public hearings for broad review and comment.